

ABSTRACT

THESIS: The Influence of an 8-week Total Body Resistance Training Program on Autonomic Function in Healthy, Young Adults

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Purpose: To analyze the influence of a Resistance Training (RT) program on autonomic function (AF) in healthy adults to determine if RT can positively affect autonomic modulation.

Methods: Fourteen men and women (age 22 ± 4 years) were tested pre- and post-training for body composition, one-repetition maximum (1RM) and AF. **Results:** 1RM for chest press increased by 15.16 kg ($p = 0.001$) and 1RM for leg press increased by 90.91 kg ($p < 0.001$). Body composition increased in lean mass by 1.5 kg ($p = 0.01$). Statistically significant results in AF did not occur. Duration of Tilt Table Test increased after training by 82.78 seconds ($p = 0.04$).

Conclusion: Our data suggests that resistance training can influence AF and suggests favorable effects during orthostatic challenges. Further research within an orthostatic intolerant population is warranted to investigate the changes in AF associated to RT exercise.